

METHOD FOR PREVENTING FUEL INFILTRATION INTO MICROPOROUS POLYMER MEMBRANES

ABSTRACT OF THE DISCLOSURE

A method for preventing fuel from migrating, i.e., infiltrating, into a microporous polymer membrane, such as that used in a fuel deoxygenator device of an aircraft to remove dissolved oxygen from the fuel, includes heating the membrane to reduce the size of micropores in the membrane from a first size to a second size that is large enough to allow migration of oxygen through the membrane and small enough to prevent migration of fuel into the membrane. The membrane is an amorphous fluoropolymer on a PVDF substrate and the micropores are reduced in size by heating the membrane at a temperature between 130°C and 150°C for 2 hours.

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